

NAT II Physical Science Analytical

Sr	Questions	Answers Choice
1	<p>A railway track from Lahore to Islamabad consists of six main stations, P, Q, R, X, Y, and Z. Trains run only according to the following condition:</p> <p>(i) From P to Q</p> <p>(ii) From Q to P and from Q to R</p> <p>(iii) From R to X</p> <p>(iv) From X to Q and from X to Y</p> <p>(v) From Z to P, from Z to Y and from Z to R</p> <p>(vi) From Y to X</p> <p>(vii) It is possible to transfer a station for another train.</p> <p>Q. The trip which requires greatest number of transfer, is:</p>	<p>A. P to R B. Q to Y C. Z to Q D. Z to R E. Z to Y</p>
2	<p>Nine Individuals – Z, Y, X, W, V, U, T, S AND R are the only candidates, who can serve on three committees labeled A, B and C.</p> <p>Each candidate should serve on exactly one of the committees.</p> <p>Committee A should consist of exactly one member more than that of committee.</p> <p>It is possible that there are no members of committee C. Among Z, Y and X none can serve on committee A. Among W, V and U none can serve on committee C. Among T, S and R none can serve on committee C.</p> <p>Q: In case R is the only individual serving on committee B, which among the following should serve on committee A?</p>	<p>A. W and S B. V and U C. V and T D. U and S E. T and S</p>
3	<p>One's ability to adjust in an environment successfully leads to happiness. War at a universal level destroys the weaker people, who are the most unable to adjust to their environment. Thus, war at the universal level puts weaklings out of their misery and allows more space for their predators to enjoy life in a better manner. As those actions have to be performed, which maximize the level of happiness of the greatest number, war at a universal level should take place.</p> <p>Q: What response would the author of the above discussion come up with, in the case of the objection that the weaklings far exceed strong people?</p> <p>I- He would respond with statement that the person making the objection is a weakling.</p> <p>II- He would respond by saying that weaklings will be miserable no matter what happens.</p> <p>III- He would respond with statement that the strong would be frustrated if the weaklings are destroyed.</p>	<p>A. I only B. II only C. III only D. I and II only E. II and III only</p>
4	<p>Follow us to the real Pakistan leaving behind the disturbances of civilization. Real Pakistan is still inhabited by the eagle, the cow, the black deer, and tigers; it is still spacious, sprawling, and majestic. Experience the freedom and serenity still to be found in -----.</p> <p>Q: Some critics are of the opinion that the intrinsic qualities of photography depend on criticism and hence it is a matter of opinion. It is rather odd, though, that in a legal connection, serious critics themselves quite often behave as if they believed criticism to be a matter of opinion. why be a critic and teach in universities - in case criticism</p>	<p>A. The qualities of photography are not dependent on criticism. B. Critics seem hypocritical. C. People can not judge the art work D. Photography is an art independent of your opinion E. artists should teach at universities.</p>

involves nothing but uttering capricious and arbitrary opinion? In the above argument the author is trying to convince that

5 In an in vitro study, 160 white cats were injected with Salt X. 160 other white cats injected with placebo. In two weeks, 39% of the white cats, who were injected with Salt X showed symptoms of Kay fever. Hence, it can be concluded that Kay fever is caused by some elements similar to the elements in Salt X.

Q: Which of the following would most strengthen the argument above?

- A. Some of the elements in Salt X are extracted from the root of a certain poisonous herb of Hunza.
- B. The blood test of the victims of Kay fever revealed the presence of a toxic element in their blood, normally found in salt X.
- C. Almost all the white cats died within two days after the first symptom appeared.
- D. Normally the rate of Kay fever among white cats is less than 0.01%.
- E. Within two weeks, about 40% of the white cats, who were injected with placebo, also contracted Kay fever.

6 Four captains and the first mates of three of them were called to attend the annual meeting at head quarter. The captains were Luqman, Manzoor, Nauman and Osaf; the first mates were Ayesha, Durya and Gia. Each person in turn delivered a report to the chairperson as follows:

Each of the first mates delivered their report exactly after her captain. The first captain to speak was Manzoor, and captain Nauman spoke after him.

(Represent the person with first letter of his name)

Q: Among the following statements, which would make M, D, N, G, L, O, A the only possible sequence of speakers?

- A. D is M's first mate; G is N's first mate; A is O's first mate.
- B. D is M's first mate; G is N's first mate; A was the second to speak after L.
- C. The order of the first four speakers was M, D, N, G.
- D. The order of the last three speakers was L, O, A.
- E. The order in which the captains spoke was M, N, L, O.

7 Two or more tealeaves out of five varieties – Livana, Mathia, Novajana, Oxia, and Piask are used in making all branded by a marketer following the rules given below.

A brand containing Livana, should also contain Novajana twice that of Livana.

A brand containing Mathia, must also have equal quantity of Oxia.

A single brand never contains Novajana as well as Oxia.

Oxia and Piask should not be used together.

A blend containing Piask should contain it in such a proportion that the total amount of Piask present should be greater than the total amount of the other tealeaves

Q: Among the following, the addition of which combination would make a brand containing two parts Novajana and one part Piask conformable with the conditions?

- A. One part Livana
- B. One part Mathia
- C. Two parts Novajana
- D. One part Oxia
- E. Two parts Piask

8 In a factory control room, there are three ON-OFF switches on the central control panel, labeled A, B and C. They are changed from default setting to a required setting based on the following rules:

In case only switch A is ON in the default setting, then turn switch B ON.

In case switches A and B are the only switches ON in the default setting, then turn switch C ON. In case all the three switches are ON, in default setting, then turn the switch C OFF. For any other default setting, turn ON all switches that are OFF and turn OFF all switches, if any, that are ON.

Q: In case, switch A is OFF in the second setting. Which of the following could have been the default setting?

- A. A ON, B ON, C ON.
- B. A ON, B ON, C OFF.
- C. A ON, B OFF, C ON.
- D. A ON, B OFF, C OFF.
- E. A OFF, B ON, C OFF.

9 In an in vitro study, 160 white cats were injected with Salt X. 160 other white cats injected with placebo. In two weeks, 39% of the white cats, who were injected with Salt X showed symptoms of Kay fever. Hence, it can be concluded that Kay fever is caused by some elements similar to the elements in Salt X.

Q: Which of the following statements would most seriously weaken the above discussion?

- A. People suffering from Kay fever are the victims of the golden viper of Sindh.
- B. One among the 160 white cats had already showed symptoms of Kay fever prior to the experiment.
- C. The natural habitats of white cats does not contain any of the elements found in Salt X.
- D. The 160 white cats used in the experiment were kept isolated from each other.
- E. The scientists administered the injections being ignorant of the

- Four captains and the first mates of three of them were called to attend the annual meeting at head quarter. The captains were Luqman, Manzoor, Nauman and Osaf; the first mates were Ayesha, Durya and Gia. Each person in turn delivered a report to the chairperson as follows:
- 10 Each of the first mates delivered their report exactly after her captain. The first captain to speak was Manzoor, and captain Nauman spoke after him.
- (Represent the person with first letter of his name)
- Q: In case A spoke immediately after L and immediately before O, and O was not the last speaker, L spoke
- A. Second
B. Third
C. Fourth
D. Fifth
E. Sixth
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- Multan Institute of Higher Studies plans to show five educational films A, B, C, D and E to a group of students. The film shows are planned in an order, which conforms to the following conditions:
- 11 A must be shown earlier than C.
B must be shown earlier than D.
- E should be the fifth film shown.
Q: In case B, D and E are to be shown one after the other in the given order, the position from first to fifth in which A could possibly be shown is
- A. Second.
B. First
C. Third
D. Fifth
E. Fourth
-
- Two or more tealeaves out of five varieties – Livana, Mathia, Novajana, Oxia, and Piask are used in making all branded by a marketer following the rules given below.
- A brand containing Livana, should also contain Novajana twice that of Livana.
A brand containing Mathia, must also have equal quantity of Oxia.
- 12 A single brand never contains Novajana as well as Oxia.
Oxia and Piask should not be used together.
- A blend containing Piask should contain it in such a proportion that the total amount of Piask present should be greater than the total amount of the other tealeaves
- Q: Among of following which is an acceptable brand in accordance with the rules?
- A. One part Livana, one part Piask
B. Two parts Mathia, two parts Livana
C. Three parts Novajana, three parts Livana
D. Four parts Oxia, four parts Mathia
E. Five parts Piask, five parts Mathia
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- Follow us to the real Pakistan leaving behind the disturbances of civilization. Real Pakistan is still inhabited by the eagle, the cow, the black deer, and tigers; it is still spacious, sprawling, and majestic. Experience the freedom and serenity still to be found in ----- Q: Everything that a person does, which is dictated because of ignorance is not voluntary. Involuntary actions are those, which produce pain and repentance. In case a man has done something in his ignorance and he dose not feel vexed due to his action, he has not acted voluntarily as he was not aware of what he was doing, not yet involuntarily since he is not pained. After reading his passage we can arrive at the conclusion that:
- 13
- A. A person is not a voluntary agent, if he acts by reason of ignorance and repents.
B. If an action is done by reason of ignorance and is bot voluntary, then it was repented.
C. a man is an involuntary agent, if he acts by reason of ignorance.
D. Some actions are either involuntary or not voluntary.
E. If a man is not voluntary agent, he acted because of ignorance and repents.
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- A chemist is preparing a nutriment using eight different vitamins and minerals ...A, B, C, D, E, H, F(Ferric), and Z(Zinc). According to the recipes, the following requirements apply to the use of ingredients:
- (i) If B is used, both C and Z must also be used
(ii) E and H must always be used together
(iii) If C is used, at least two of A, B and F must also be used
(iv) C and H cannot be used together
(v) E, F and Z cannot all be used in a same nutriment
(vi) A, D, and Z cannot all be used in the same nutriment
- 14
- Q: Which of the following is a suitable combination of vitamins and minerals for a nutriment?
- A. A, B, C, F
B. D, E, H, Z
C. A, D, E, Z
D. C, D, E, F
E. E, H, F, Z

- An observatory is setting up a schedule for school children to view a returning comet. Five school classes K, L, N, O, and P-will each view the comet exactly once during the four nights. Monday through Thursday, of its maximum brightness. Excellent viewing conditions 'are predicated for all four nights. The scheduling is subject to the following constraints:
- At most two classes can view the comet on any given night.
- 15 Class K cannot view the comet on the same night that Class N does.
- Class L must view the comet on a night prior to the night when Class P views the comet.
- Class O must view the comet on the same night that Class P does.
- Q: If Class O can view the comet neither on Wednesday nor on Thursday, which of the following must be true?
- A. Class K view s the comet on Monday.
 B. Class L views the comet on Monday.
 C. Class L views the comet on Tuesday.
 D. Class N views the comet on Wednesday.
 E. Class views the comet on Thursday.
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- Oxia and Piask should not be used together.
- A blend containing Piask should contain it in such a proportion that the total amount of Piask present should be greater than the total amount of the other tealeaves
- Q: Among the below mentioned brands, which can be made agreeable by eliminating some or all of one type of tealeaves?
- A. One part Livana, one part Mathia, one part Novajana, four parts Piask
 B. One part Livana, two parts Novajana, one part Oxia, four parts Piask
 C. One part Livana, one part Mathia, one part Oxia, one part Piask
 D. Two parts Livana, two parts Novajana, one part Oxia, two parts Piask
 E. Two parts Mathia, one part Novajana, two parts Oxia, three parts Piask
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- Nine Individuals – Z, Y, X, W, V, U, T, S AND R are the only candidates, who can serve on three committees labeled A, B and C.
- Each candidate should serve on exactly one of the committees.
- 17 Committee A should consist of exactly one member more than that of committee.
- It is possible that there are no members of committee C. Among Z, Y and X none can serve on committee A. Among W, V and U none can serve on committee C. Among T, S and R none can serve on committee C.
- Q: In case, any of the nine individuals serves on committee C, which among the following could not be the candidate to serve on committee A?
- A. R
 B. Y
 C. W
 D. T
 E. S
-
- A bus has exactly six stops on its route. The bus first stops at stop one and then at stops two, three, four, five and six respectively. After the bus leaves stop six, the bus turns and returns to stop one and repeats the cycle. The stops are at six buildings that are, in alphabetical order L, M, N, O, P and Q.
- 18 P is the third stop. M is the sixth stop. The stop O is the stop immediately before Q. N is the stop immediately before L.
- Q: In case N is the fourth stop, which among the following must be the stop immediately before P?
- A. O
 B. Q
 C. N
 D. L
 E. M
-
- One's ability to adjust in an environment successfully leads to happiness. War at a universal level destroys the weaker people, who are the most unable to adjust to their environment. Thus, war at the universal level puts weakling out of their misery and allows more space for their predators to enjoy life in a better manner. As those actions have to be performed, which maximize the level of happiness of the greatest number, war at a universal level should take place.
- 19 Q: If Rubina was born in KPK, then she is a citizen of Pakistan, The statement above can be deduced from which of the following statement?
- A. Every citizen of the Pakistan is resident either of one of the province or of one of the tribal area.
 B. Rubina was born either in KPK or in Sindh.
 C. Some people born in KPK are citizens of Pakistan.
 D. Everyone born in Pakistan is a citizen of Pakistan.
 E. Rubina is citizen either of Pakistan or of any other country.

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- A. A ON, B ON, C OFF.
- B. A ON, B OFF, C ON.
- C. A OFF, B ON, C ON.
- D. A OFF, B ON, C OFF.
- E. A OFF, B OFF, C OFF.

Q: Which of the following default settings leads to a second setting, where only one switch is OFF?